

## REMARKS

Claims 1-26 are pending in the application. Claims 1, 14, 19, and 22 are independent. By the foregoing Amendment, claims 14 and 19 have been amended. These changes are believed to introduce no new matter and their entry is respectfully requested.

### Rejection of Claims 1-4, 6-7, and 14-16 Under 35 U.S.C. §102(b)

In the Office Action, the Examiner rejected claims 1-4, 6-7, and 14-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,195,548 to Schultheiss et al. (hereinafter “Schultheiss”). A claim is anticipated only if each and every element of the claim is found, either expressly or inherently, in a reference. (MPEP §2131 *citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). The identical invention must be shown in as complete detail as is contained in the claim. *Id. citing Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)). Applicant respectfully traverses the rejection.

Independent claim 1 recites in pertinent part “a first device coupled to a transmission medium; a second device coupled to the transmission medium; and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence, the data code sequence for the purpose of controlling the second device, the first device comprising circuitry to generate a representation of the data code sequence if the data code sequence is not recognized by the first device, and to transfer the representation of the data code sequence to the transmission medium to control the second device” and independent claim 14 recites in pertinent part “a receiving at a first device a data code sequence from a remote control unit, the data code sequence recognized by the second device for controlling a second device; generating a representation of the data code sequence using the first device if the data code sequence is not recognized by the first device; and transferring the representation of the data code sequence onto a transmission medium to control the second device.”

In the Office Action, the Examiner states that Schultheiss teaches a system having a first and a second device coupled to a transmission medium and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence recognized by the

second device and for the purpose of controlling the second device. The Examiner asserts further that Schultheiss teaches that the first device includes circuitry to generate a representation of the data code sequence if the data code sequence is not recognized by the first device and to transfer the representation of the data code sequence to the transmission medium to control the second device. Applicant respectfully disagrees.

Applicant respectfully submits that Schultheiss is not properly applied to claims 1 and 14. In Schultheiss, the “unified” and “integrated” remote control 50 controls both the personal computer 12 and the television 40. For example, column 7, lines 38-41 of Schultheiss teach that “TV commands 74a may be received directly by television interface 200 from remote control 50’, rather than using personal computer 12 as an intermediary.” Applicants respectfully submit that this and other teachings in Schultheiss make it clear that the remote control unit 50 in Schultheiss is programmed to control *both* the personal computer 12, with keys 58 and 64, and the television interface 200, with keys 58 and 62. The remote control unit 50 in Schultheiss is not limited to controlling only one of the devices.

Even assuming that Schultheiss is properly applied to claims 1 and 14, Applicant respectfully submits that Schultheiss fails to teach the identical invention as recited in claims 1 and 14. The Examiner asserts that Schultheiss teaches that the remote control 50 transmits a data code sequence (TV command signal 74a) and that the personal computer 12 also is to generate a representation of the TV command signal 74a.” That is, the Examiner appears to be arguing that the TV command signal 74a also is a representation of the TV command signal 74a. Applicant respectfully disagrees and submits that the Examiner has not shown how the command signal 74a is also a representation of the command signal 74a.

Applicant respectfully submits that in Schultheiss there is no need to generate a representation of the command signal 74a as the Examiner asserts because the remote control 50 is programmed to control both the television 40 and the personal computer 12, as discussed above. Applicant respectfully submits that the personal computer 12 fails to consider consequences of not recognizing commands from the remote control unit 50. There is no need to consider consequences of not recognizing commands from the remote control unit 50, including

the personal computer 12 having circuitry to generate a representation of the command signal 74a, because a user merely needs to press the appropriate keys to control the personal computer 12, the television 40, or the television interface 200.

It also follows that because Schultheiss fails to teach that the personal computer 12 is to generate a representation of the command signal 74a, Schultheiss also fails to teach that the personal computer 12 transfers representation of the command signal 74a to a transmission medium.

Applicant respectfully submits that Applicant only needs to demonstrate that one element of the claimed invention is missing to establish that the Examiner has not met the initial burden of making a *prima facie* case of anticipation with respect to the claimed invention. Applicant has shown that at least two elements of claims 1 and 14 are not taught in Schultheiss and therefore that the Examiner has failed to establish a *prima facie* case of anticipation of claims 1 and 14 over Schultheiss. Accordingly, Applicants respectfully request that the Examiner reconsider and remove the rejection to claims 1 and 14.

Claims 2-4 and 6-7 properly depend from claim 1, which Applicants respectfully submit is patentable. Accordingly, Applicant respectfully submits that claims 2-4 and 6-7 are patentable for at least the same reasons that claim 1 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Claims 15-16 properly depend from claim 14, which Applicants respectfully submit is patentable. Accordingly, Applicant respectfully submits that claims 15-16 are patentable for at least the same reasons that claim 14 is patentable. *Id.* Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 2-4, 6-7, and 15-16.

#### Rejection of Claims 19-20 Under 35 U.S.C. §102(b)

In the Office Action, the Examiner rejected claims 1-4, 6-7, and 14-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,867,647 to Harrington et al. (hereinafter “Harrington”). Applicant respectfully traverses the rejection.

Independent claim 19 recites in pertinent part “a first device coupled to a transmission medium; a second device coupled to the transmission medium; a remote control unit for controlling a third device, *the remote control unit to transmit a data code sequence on a carrier*, the data code sequence recognized by and for controlling the third device, the first device comprising circuitry to measure the data code sequence, to generate a representation of the data code sequence from measurements, and to transfer the representation of the data code sequence to the transmission medium, the second device comprising circuitry to translate the representation of the data code sequence back to the data code sequence and to transfer the data code sequence to the third device to control the third device” (emphasis added). Support for these changes can be found in Applicant’s Specification at paragraph [0020] according to at least one embodiment.

In the Office Action, the Examiner states that Harrington teaches a first device coupled to a transmission medium, a second device coupled to the transmission medium, a remote control unit for controlling a third device, the remote control unit to transmit a data code sequence, the data code sequence recognized by and for controlling the third device, the first device comprising circuitry to measure the data code sequence, to generate a representation of the data code sequence from measurements, and to transfer the representation of the data code sequence to the transmission medium, the second device comprising circuitry to translate the representation of the data code sequence back to the data code sequence and to transfer the data code sequence to the third device to control the third device. Applicant respectfully disagrees.

Applicant respectfully submits that Harrington is not properly applied to claim 19. In Harrington, only a single device 1 is controlled by the remote control unit 10. The first means 5 for receiving a radio signal and the means 4 for receiving a radio signal are all part of the remote control unit 10. They are not separate devices a remote control unit would control. Thus Harrington is not concerned with controlling two dissimilar devices.

Even assuming that Harrington is properly applied to claim 19, Applicant respectfully submits that Harrington fails to teach the identical invention as recited in claim 19. For example, in claim 19 the data code sequence is transmitted from the remote control unit on a carrier. That

is, the data code sequence is not the same as the carrier. Harrington appears to teach modulating and demodulating a carrier from and converting a carrier from infrared to and FM radio signal form. However, Harrington fails to teach generating a representation of the data code sequence itself. Harrington does not teach that the first means 5 for receiving a radio signal has circuitry to generate a representation of the data code sequence itself. It also follows that because Harrington fails to teach the first means 5 for receiving a radio signal has circuitry to generate a representation of the data code sequence itself, Harrington also fails to teach the first means 5 for receiving a radio signal has circuitry to transfer the representation of the data code sequence to a transmission medium.

Applicant respectfully submits that Applicant only needs to demonstrate that one element of the claimed invention is missing to establish that the Examiner has not met the initial burden of making a *prima facie* case of anticipation with respect to the claimed invention. Applicant has shown that at least two elements of claim 19 are not taught in Harrington and therefore that the Examiner has failed to establish a *prima facie* case of anticipation of claim 19 over Harrington. Accordingly, Applicants respectfully request that the Examiner reconsider and remove the rejection to claim 19.

Claim 20 properly depends from claim 19, which Applicants respectfully submit is patentable. Applicant respectfully submits therefore that claim 20 is patentable for at least the same reasons that claim 19 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 19-20.

#### Rejection of Claim 5 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over Schultheiss in view of U.S. Patent No. 5,778,256 to Darbee (hereinafter “Darbee”). To establish a *prima facie* case of obviousness, an Examiner must show that that there is some suggestion or motivation to modify a reference to arrive at the claimed invention, that there is some expectation of success, and that the cited reference teaches each and every



element of the claimed invention. (MPEP §2143.) *citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Applicant respectfully traverses the rejection.

Claim 5 properly depends from claim 1, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claim 5 is patentable for at least the same reasons that claim 1 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.1988))). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claim 5.

#### Rejection of Claims 8-10 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 8-10 under 35 U.S.C. §103(a) as being unpatentable over Schultheiss in view of U.S. Patent No. 6,111,677 to Shintani et al. (hereinafter “Shintani”). Applicant respectfully traverses the rejection.

Claims 8-10 properly depend from claim 1, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claims 8-10 are patentable for at least the same reasons that claim 1 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988))). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 8-10.

#### Rejection of Claims 11-13 and 17-18 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 11-13 and 17-18 under 35 U.S.C. §103(a) as being unpatentable over Schultheiss in view of *HAVi: Home Audio Video Interoperability* by Jussi Teirikangas of Helsinki University of Technology. (hereinafter “Teirikangas”). Applicant respectfully traverses the rejection.

Claims 11-13 properly depend from claim 1, which Applicant respectfully submit is patentable, and claims 17-18 properly depend from claim 14, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claims 11-13 and 17-18 are patentable for at least the same reasons that claims 1 and 14, respectively, are patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988))).

Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 11-13 and 17-18.

Rejection of Claim 21 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claim 21 under 35 U.S.C. §103(a) as being unpatentable over Harrington in view of Teirikangas. Applicant respectfully traverses the rejection.

Claim 21 properly depends from claim 19, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claim 21 is patentable for at least the same reasons that claim 19 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claim 21.

Rejection of Claims 22-25 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 1-4, 6-7, and 14-16 under 35 U.S.C. §103(a) as being unpatentable over Shintani in view of U.S. Patent No. 5,870,593 to Prunier et al. (hereinafter “Prunier”). Applicant respectfully traverses the rejection.

Independent claim 22 recites in pertinent part “an optical receiver; a demodulator in communication with the optical receiver, the demodulator to demodulate an optical signal provided by the optical receiver and to recover a data code sequence from the optical signal; a processor in communication with the demodulator, the processor to sample the data code sequence and to generate a representation of the data code sequence from samples; a buffer in communication with the processor, the buffer to buffer the representation of the data code sequence to maintain a continuous transmission of the representation of the data code sequence to an input/output (I/O) interface; and an I/O interface in communication with the buffer, the I/O interface to receive the representation of the data code sequence and to convert the representation of the data code sequence into a format compatible with electrical characteristics of a transmission medium.”

In the Office Action, the Examiner states that Shintani teaches an optical receiver 122, buffer 124, and a cable I/O interface 126 coupled to an IEEE 1394 bus medium. The Examiner states that one of ordinary skill in the art recognizes that the output of the optical receiver, demodulator, and processor provide the same data stream to the buffer 124 and therefore the optical receiver 122 is an obvious combination of the optical receiver, demodulator, and processor. Applicant respectfully disagrees.

Applicant respectfully directs the Examiner to MPEP §2143.01, which points out that *a statement* that modifications to the cited reference would have been well within the ordinary skill of the art at the time the claimed invention was made *is insufficient* to support an obviousness rejection. Support must be found in the references themselves. Applicant respectfully submits that the Examiner has not provided such support in Shintani and thus cannot use this asserted modification to support an obviousness rejection of claim 22.

The Examiner asserts further that Prunier teaches sampling a data code sequence and generating a representative of the data code sequence from the samples to be stored in the buffer. The Examiner concludes that it would have been obvious to “include sampling the data code sequence and generating a representation of the data code sequence from samples to be stored in the buffer in the device of Shintani because it would provide continuous data stream without unnecessarily losing data at all time, thus increasing communication reliability.” Applicant respectfully disagrees.

Applicant respectfully submits that Shintani in view of Prunier fails to teach or fairly suggest each and every element of claim 22. For example, the Examiner concedes that Shintani fails to teach sampling the data code sequence and generating a representation of the data code sequence from the samples. Applicant respectfully submits that Prunier fails to make up for this deficiency. Prunier is clear that “Signals P, E, and S, produced by different parts of the generator ... signal E is obtained in a way similar to the way in which pulses are generated by a conventional circuit... divider 10 supplies signal P for modulating signal E. The width of pulses I [in the signal S] is determined by programming a dividing rate N of divider 10. In the same way,



frequency and duty cycle of signal E is programmable by the CPU.” Thus, there is no teaching in Prunier that any of the signals P, E, or S is a representation of each other. Further, contrary to the Examiner’s assertion, nowhere is it taught in Prunier that a data code sequence is “sampled.” The term does not appear in Prunier.

Because Shintani in view of Prunier fails to teach each and every element of claim 22, Applicant respectfully submits that claim 22 is patentable over Shintani in view of Prunier. Claims 23-25 properly depend from claim 22, which Applicant respectfully submits is patentable. Applicant therefore respectfully submits that claim 23-25 are patentable for at least the same reasons that claim 22 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 22-25.

#### Rejection of Claim 26 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claim 26 under 35 U.S.C. §103(a) as being unpatentable over Shintani in view of Prunier in further view of U.S. Patent No. 6,728,600 B1 to Contaldo et al. (hereinafter “Contaldo”). Applicant respectfully traverses the rejection.

Claim 26 properly depends from claim 22, which Applicant respectfully submits is patentable. Accordingly, Applicant respectfully submits that claim 26 is patentable for at least the same reasons that claim 22 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.1988)). Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claim 26.

## CONCLUSION

Applicant submits that all grounds for rejection have been properly traversed, accommodated, or rendered moot and that the application is now in condition for allowance. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

Respectfully submitted,

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